

AMENDMENTS

In the Claims

1-19. (Canceled)

20. (New) A failover system, comprising:

a first iSCSI controller; and

a second iSCSI controller, the second iSCSI controller coupled to the first iSCSI controller, the first iSCSI controller configured to receive an I/O request over a network and copy the I/O request to memory corresponding to the second iSCSI controller, wherein responsive to detecting a failure of the first iSCSI controller, the second iSCSI controller determines whether the I/O request has been committed by the first iSCSI controller, wherein responsive to determining that the I/O request has been committed, the second iSCSI controller assumes the network address of the first iSCSI controller, retrieves the copy of the I/O request from the memory, and writes the copy of the I/O request to a storage system.

21. (New) The system of claim 20, wherein responsive to determining that the I/O request has not been committed, the second iSCSI controller assumes the network address of the first iSCSI controller and receives the I/O request resent from a server and writes the resent I/O request to the storage system.

22. (New) The system of claim 21, wherein the second iSCSI controller assuming the network address responsive to determining that the I/O request has not been committed

further comprises retrieving the network address of the first iSCSI controller from the memory.

23. (New) The system of claim 21, wherein the second iSCSI controller includes a first network address and a second network address, the first network address corresponding to a network address of the second iSCSI controller and the second network address corresponding to the network address of the first iSCSI controller.

24. (New) The system of claim 20, further including a first iSCSI TCP/IP protocol stack coupled between the first iSCSI controller and the network, and a second iSCSI TCP/IP protocol stack coupled between the second iSCSI controller and the network.

25. (New) The system of claim 20, wherein the first iSCSI controller and the second iSCSI controller are each configured to communicate with a remotely located host server over the network.

26. (New) The system of claim 20, wherein the network includes an IP network.

27. (New) The system of claim 20, wherein the storage system includes a fiber channel storage unit.

28. (New) The system of claim 20, wherein the second iSCSI controller assuming the network address of the first iSCSI controller further comprises retrieving the network address of the first iSCSI controller from the memory.

29. (New) A failover method, comprising:
- receiving at a first network address an I/O request;
  - copying the I/O request;
  - storing the copy of the I/O request at a second network address;
  - detecting whether the I/O request can be processed at the first network address;
  - responsive to detecting that the I/O request cannot be processed at the first network address, determining whether the I/O request has been committed;
  - responsive to determining that the I/O request has been committed, assuming the first network address from the second network address;
  - retrieving the copy of the I/O request; and
  - writing the copy of the I/O request to a storage system.
30. (New) The method of claim 29, wherein responsive to determining that the I/O request has not been committed, assuming the first network address from the second network address, receiving a resent I/O request, and writing the resent I/O request to the storage system.
31. (New) The method of claim 30, wherein assuming the first network address responsive to determining that the I/O request has not been committed further comprises retrieving the first network address from memory.
32. (New) The method of claim 29, wherein receiving an I/O request includes receiving the I/O request over a network from a remotely located host server.

33. (New) The method of claim 29, wherein assuming the first network address responsive to determining that the I/O request has been committed further comprises retrieving the first network address from memory.

34. (New) A failover system, comprising:

means for detecting whether an I/O request can be processed at a first network address;

responsive to detecting that the I/O request cannot be processed at the first network address, means for determining whether the I/O request has been committed;

responsive to determining that the I/O request has been committed, means for assuming the first network address from the second network address;

means for retrieving the copy of the I/O request; and

means for writing the copy of the I/O request to a storage system.

35. (New) A network controller for use on a network, comprising:

a communication port configured to receive status information and a copy of an I/O request from a second network controller;

a memory configured to store the copy of the I/O request; and

logic configured to detect a failure of the second network controller and determine whether the I/O request has been committed by the second network controller, wherein responsive to determining that the I/O request has been committed, the logic further configured to assume the network address of the second network controller, retrieve the copy of the I/O request from the memory, and write the copy of the I/O request to a storage system.

36. (New) The network controller of claim 35, wherein responsive to determining that the I/O request has not been committed, the logic is further configured to assume the network address of the second network controller, receive the I/O request resent from a server, and write the resent I/O request to the storage system.

37. (New) The network controller of claim 36, wherein the logic assuming the network address responsive to determining that the I/O request has not been committed further comprises the logic retrieving the network address of the second network controller from the memory.

38. (New) The network controller of claim 36, wherein the logic is configured to assign the network controller with a primary network address and a secondary network address, the primary network address corresponding to the network address of the network controller before detected failure of the second network controller, the secondary network address corresponding to the network address of the second network controller substantially upon detected failure of the second network controller.

39. (New) The network controller of claim 35, further including an iSCSI TCP/IP protocol stack coupled between the network controller and the network.

40. (New) The network controller of claim 35, wherein the network controller is configured as an iSCSI controller.

41. (New) The network controller of claim 35, wherein the logic is configured to communicate with a remotely located host server over the network.

42. (New) The network controller of claim 35, wherein the network includes an IP network.
43. (New) The network controller of claim 35, further including a second communication port configured to enable access to the storage system.
44. (New) The network controller of claim 35, wherein the logic assuming the network address responsive to determining that the I/O request has been committed further comprises the logic retrieving the network address of the second network controller from the memory.
45. (New) A computer-readable medium having a computer program for processing an I/O request on behalf of a failed controller, comprising:
- logic configured to detect a failure of a controller and determine whether the I/O request has been committed by the controller, wherein responsive to determining that the I/O request has been committed, the logic is further configured to assume the network address of the second network controller, retrieve the copy of the I/O request from the memory, and write the copy of the I/O request to a storage system.